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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE 1989 EXPLORATION PROGRAM

OF THE ROCK AND ROLL PROPERTY

NTS 104B/11 Latitude: 56°-43'N Longitude: 13**2**°-14'W Liard Mining Division

Prepared for:

THIOS RESOURCE INC. and CONSOLIDATED POWERGEM RESOURCE CORP. Vancouver, B.C.

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M.R. # \$ VANCOUVER, B.C.	

Prepared by:

Rex Pegg, BASc., P.Eng., KEEWATIN ENGINEERING INC. #800 - 900 West Hastings Street Vancouver, B.C. V6C 1E5

December 11, 1989

Keewatin Engineering Inc.

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The Rock & Roll property is located within the 'Iskut Gold Camp' which hosts the mesothermal, shear/vein Snip and Skyline deposits. The Snip deposit presently has ore reserves of 1.032 million tons grading 0.875 oz/ton gold. The Rock & Roll is situated, approximately, 9 km northwest of the Snip deposit.

During September of 1989, Keewatin Engineering Inc. was engaged by Thios Resources Inc. and Consolidated Powergem Resource Corp. for the purpose of conducting a limited reconnaissance exploration program. The target was economic gold \pm silver and copper mineralization.

1. Location, Access, Physiography and Climate (Figure 1)

The property is located, approximately, 125 km northwest of Stewart, B.C. and 65 km northeast of Wrangell, Alaska. The Rock and Roll is centred at latitude 56°-43'N and longitude 132°-14'W on NTS Map Sheet 104B/11 (Figure 2).

Access to the area is by fixed wing aircraft from Smithers, Terrace or Vancouver to the Bronson airstrip which services the Snip deposit. The project is accessed by helicopter from the airstrip.

The property lies within the Iskut River valley covering an area of mostly moderate to gentle slopes covered by large stands of hemlock, spruce and devil's club. A few swampy areas and topographic 'knobs' characterized by steep cliffs are also present. The elevations within the property range from 200 feet along the Iskut River to 1,000 feet on the highest hills (see Figure 3).

Precipitation is relatively heavy throughout much of the year, although the property's low elevation permits work from May through December.

2. <u>Property Status</u> (Figure 2)

The Rock and Roll claims are located in the Liard Mining Division and are registered in the name of Prime Capital Corporation.

The property is currently under option to Thios Resources Inc. and Consolidated Powergem Resource Corp.



TABLE 1: CLAIM STATUS

<u>Claim Name</u>	Record <u>Number</u>	No. of <u>Units</u>	Date Recorded	<u>Expiry Year</u>
Rock	5439	20	November 8, 1988	1989
Roll	5440	20	November 8, 1988	1989

3. <u>History of Exploration</u>

Exploration in the Iskut River area apparently dates back to 1907 when work was carried out in the Mount Johnny area. The present Rock and Roll claims' area was probably explored by several major companies as part of the porphyry copper search during the 1960's.

The Rock and Roll claims were staked during November of 1988. That year, Thios Resources Inc. collected 51 soil and 6 rock samples and analyzed them for gold and 28 element I.C.P.

4. <u>1989 Work Program Summary</u>

During September, field personnel carried out a limited reconnaissance program on the property. The crew collected a total of 158 soil, 3 silt and 12 rock samples along compassed, flagged and topofilled lines and topographic contour lines. Geological mapping and prospecting was done during the course of the geochemical survey.

GEOLOGY

1. <u>Regional Geology</u> (see Figure 4)

The Iskut River area lies within the Intermontane tectono-stratigraphic belt - one of five, parallel, northwest/southeast trending belts which comprise the Canadian Cordillera. This belt of Permian to Middle Jurassic volcanic and sedimentary rocks define the Stikine/Stikinia terrane. This is bounded on the west by the Coast Plutonic Complex and overlapped on the east by sediments of the Bowser Basin. The belt has been intruded by at least four episodes of plutonic rocks, from Late Triassic to Oligocene-Miocene.

The main stratigraphic unit in the area of the property appears to be Palaeozoic metavolcanics and metasediments. These are characterized by reef limestones with intercalated sediments and mafic to felsic volcanics. The strata may also represent Upper Triassic limestone and overlying sediments



CLAIM MAP ROCK & ROLL PROPERTY

Figure 2



TOPOGRAPHIC MAP ROCK & ROLL PROPERTY

Figure 3

KEEWATIN ENGINEERING INC.

and basic to felsic flows and tuff. Anderson (1989) believes that the limestone, with local chert breccia and conglomerate, represents a Late Triassic slope break of the Stikine assemblage.

2. <u>Property Geology</u> (see Map 1)

Generally, more than half of the property is covered by the Iskut River, swamps and small lakes.

On the north side of the Iskut River, an inlier of Palaeozoic(?) sediments and volcanics was observed within recent basalts. The sediments consist of black to grey siltstone which locally grade into pale green to buff chert. The volcanics appear to be greenish grey, fine-grained andesitic flows. The recent basalts are porphyritic flows which are locally vesicular. Numerous bombs were observed within the flows.

On the south side of the Iskut River, Palaeozoic sediments and lesser volcanics appear to underlie most of the area. Black to dark grey, locally calcareous siltstone with occasional interbeds of pale chert, greywacke and/or argillite predominant in the north. To the south, siltstone and limestone underlie most of the traversed area. The limestone is fine-grained, grey to black in colour and contains local interbeds of calcareous sandstone. The volcanics are greenish grey in colour, finegrained, massive to porphyritic and andesitic in composition. The sediments on the west side of Lost Lake appear to be intruded by a small alkaline pluton. This intrusion is an augite-plagioclase porphyry which has a fine-grained, buff-brown matrix with 2 to 4 mm light green augite and 1 to 3 mm grey plagioclase crystals.

3. <u>Mineralization</u>

Local pyritic fracture fillings and disseminations, up to 2%, associated with quartz-calcite veinlets and fracture fillings were observed within andesites and silty sediments. Pyritic fracture fillings, up to 5%, and rusty patches occur locally in the limestones.

At one locality, a 15 cm wide shear with quartz-calcite veinlets and fracture fillings and 1% pyrite was observed in cherty siltstones (#30603).

3



FIGURE 4

KEEWATIN ENGINEERING INC.

4. <u>Structure and Alteration</u>

No major structures were observed on the property. The sediments are typically weak to moderately well foliated. One narrow (15 cm) shear zone was observed on the south side of the Iskut River, within the Rock claim. Local, narrow shears and fracture zones were also noted along the limestone cliffs on the west side of the Roll claim.

Local zones of weak to moderate chlorite alteration, silicification and quartz-calcite veinlets associated with shear/fracture zones were observed in the siltstones. Only weak to locally strong chloritic alteration was noted within the volcanics.

GEOCHEMISTRY

1. <u>Sampling</u>

A total of 158 soil, 3 silt and 12 rock samples were collected during the 1989 field season. The soil samples (see Appendix 6) were taken from the 'B' horizon with the use of a long handled shovel and placed in kraft paper sample bags. During the course of the soil survey, two soil test pits (see Appendix 8) were excavated in order to investigate the soil horizon development within the property. The silt samples (see Appendix 6) were generally collected from the active portion of streams which drain the project area and were placed in kraft paper sample bags. The rocks are grab samples (see Appendix 4) which were collected during the course of geological mapping.

2. <u>Analysis</u>

All of the samples were shipped to Bondar-Clegg and Company of Vancouver for analysis. The soil and silt samples were analyzed for Au (faa), Ag and Cu, while the rock samples were analyzed for Au (faa), Ag, Cu and As.

The Bondar-Clegg analytical methods are as follows:

(a) <u>Procedure for Geochemical Gold Analysis</u>

A prepared sample of 10 to 30 grams is mixed with a flux which is composed mainly of lead oxide. The proportions of the flux components are adjusted depending on the nature of the sample. Silver is added to help collect the gold. The samples are fused at 195°F until a clear melt is obtained. The lead button which also contains the precious metals is then separated from the slag. Heating in the cupellation furnace separates the lead from the noble metals. The precious metal beads that remain are transferred to test tubes and dissolved with aqua-regia. The solution is analyzed using Atomic Absorption by comparing the readings of these solutions with readings of standard solutions.

Contamination Prevention

The test tubes and cupels are used only once so that there is no possibility of cross contamination. The fusion crucibles are cleared before re-use by discarding any which had high samples in them. During the analysis a blank solution is run between each sample to ensure that there is no carry-over.

(b) Determination of Ag and Cu by Atomic Absorption Analysis

The samples of 0.5 grams in weight are digested in test tubes with concentrated nitric and hydrochloric acids. These tubes are heated in hot water baths for two and one-half hours. The sample is then diluted and mixed. This solution is analyzed by atomic absorption using the appropriate lamp and wavelength for each element. The absorbance is recorded and compared to a standard series to determine the amount of the element that is present.

Contamination Prevention

The test tubes are used for atomic absorption analysis only. The test tubes are cleaned between uses with soap and deionized water rinses. If the sample results are high, the test tubes are discarded.

(d) <u>Determination of Arsenic by Borohydride Generation</u>

Samples of 0.5 grams in weight are digested in borosilicate glass test tubes, with concentrated nitric and hydrochloric acids. These tubes are heated in a 90 degree Celsius water bath for two and one-half hours. The sample is then diluted with 14% HCl and mixed. A 0.5 ml aliquot is taken from this solution and HCl, deionized water, and potassium iodide are added. The resulting mixture is allowed to sit for one hour, after which it is run through a hydride generation system. In this system, the solution is reduced with sodium borohydride, releasing arsenic as arsine gas. The arsine gas is then swept into a quartz furnace mounted on a flame AA unit. The absorbance is recorded and compared to a standard series to determine the amount of arsenic present.

5

Quality Control

Standards, repeats, and blanks are run with each batch of samples. These are carefully checked, and reweighs of samples are ordered if necessary. High arsenic results are also checked by running the original solution by flame AA, and comparing the results from the two procedures.

3. <u>Description and Discussion of Results</u>

Results from the soil and silt sampling revealed scattered elevated to anomalous gold, silver and copper contents. Elevated sample results include 4 single point gold values (20 - 56 ppb), 5 single point silver values (1.0 - 3.8 ppm) and 5 copper values (141 - 366 ppm). One of the elevated copper results (153 ppm) has a coincident silver result of 1.2 ppm. Two of the elevated copper values are contiguous and located at 89RM-S400 - 3+00N and 3 + 25N. The 56 ppb gold anomaly, unfortunately, lies to the north of the property boundary. The 1988 soil sample sites were not observed during the course of the year's work. The results from these samples are quite similar to those from this year with the exception of silver. Generally, silver levels from the south side of the Iskut River are much higher in the 1988 results. This may be due to the different sample locations and/or the use of a different analytical laboratory.

The test pits excavated at 5+50S, 9+50E and 5+40S, 13+55E both revealed a washed sand horizon, at a depth of 20 and 40 cm respectively. The sand layer is 20 to 55 cm thick and is underlain by several clay and sand horizons. The extent of this type of cover has not yet been determined. These sediments may be attributed to a lake which probably occupied the Iskut valley after deglaciation of the area.

The rock sample results indicate only slightly elevated gold, silver, arsenic and copper contents. Values up to 16 ppb gold, 0.3 ppm silver, 39.0 ppm arsenic and 136 ppm copper were obtained. The 1988 grab sample (#18970) that ran 1,572 ppm copper was not located or investigated.

CONCLUSIONS AND RECOMMENDATIONS

Although no significant mineralization has been found to date on the Rock and Roll property, several portions of the ground are still relatively unexplored. The soil and silt sample results, to date, are mostly at background levels, although a few low level gold, silver and copper anomalies were obtained. The presence of a fluvial sediment cover, as observed in the test pits, may have limited the success of the geochemical surveys. The extent of this mask and/or the depth to bedrock will determine the effectiveness of geochemistry in delineating prospective target areas.

Additional prospecting and mapping is recommended to cover the unexplored sections of the property. This would include the southeast corner of the Rock claim where an observed minor shear may indicate the presence of other more prospective structures. This should also include the west side of the Roll claim where a 1988 grab sample of pyritic sediment ran 1,572 ppm copper. It is also recommended that all of the low level soil anomalies be investigated.

Respectfully submitted,

Rex Pegg, BASc., P.Eng.



7

BIBLIOGRAPHY

Anderson, R.G. (1989): A Regional Overview of Palaeozoic and Mesozoic Stratigraphy and Plutonism for the Iskut Map Area (104B), Northwestern, B.C.

Montgomery, A. and Ikona, C.K. (1989): Geological Report on the Rock and Roll Mineral Claims for Thios Resources Inc.

Pegg, R.S. (1989): Stewart-Sulphurets-Iskut Areas - Geological Compilation (private report).

APPENDIX 1

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I, REX STEPHEN PEGG, of #1 - 410 Mahon Avenue in the District of North Vancouver in the Province of British Columbia, do hereby certify that:

- 1) I am a graduate of the University of Toronto, BA.Sc. (1976) in Geological Engineering (Exploration option) and have practised my profession continuously since graduation.
- I have over 13 years of experience in exploration for base and precious metals in the Canadian 2) Cordillera.
- I am a member in good standing of the Association of Professional Engineers of British 3) Columbia.
- I am an independent consulting geologist with an office at #1-410 Mahon Avenue, North 4) Vancouver, British Columbia.
- I am presently under contract to Keewatin Engineering Inc. with offices at Suite 800 900 5) West Hastings Street, Vancouver, British Columbia.
- I am the author of the report entitled "Geological and Geochemical Report on the 1989 6) Exploration Program of the Rock and Roll Property, Liard Mining Division, British Columbia", dated December 11, 1989.
- 7) I have personally performed or supervised the work referenced in this report and I am familiar with the regional geology and geology of nearby properties.
- I do not own or expect to receive any interest (direct, indirect or contingent) in the property 8) described herein nor in the securities of Prime Capital Corporation, Thios Resources Inc. nor Consolidated Powergem Resources Corp., in respect of services rendered in the preparation of this report.

Dated at Vancouver, British Columbia this 11th day of December, 1989.



Respectfully submitted,

Rex S. Pegg, BA.Sc., P.Eng.

APPENDIX 2

i

Summary of Field Personnel

SUMMARY OF FIELD PERSONNEL

R. Pegg	-	Senior Geologist
C. Lloyd	-	Project Geologist
J. Boles	-	Junior Geologist
M. Renning	-	Prospector
S. Abram	-	Field Assistant
J. Leonard	-	Field Assistant
N. Thomas	-	Field Assistant
V. Jordan	-	Cook

September 28, 1989
September 28 - 29, 1989



APPENDIX 3

Statement of Expenditures

STATEMENT OF EXPENDITURES

i) Labour:

	R. Pegg - Senior Geologist C. Lloyd - Project Geologist J. Boles - Junior Geologist M. Renning - Prospector V. Jordan - Cook/First Aid Attendant S. Abram - Senior Field Asst. J. Leonard - Field Asst.	1 2 2 2 2 2 2 2 2 2 2	day days days days days days days	000 00000	\$400/day \$350/day \$275/day \$225/day \$225/day \$200/day	\$	400.00 700.00 550.00 550.00 450.00 450.00 400.00		
	N. I flomas - Field Assi.	Z	aays Totol	@	\$200/day	-	400.00	•	2 000 00
::)	Coochemical Analysia		Lotai	La	idour:			Þ.	5,900.00
11)	Geochemical Analysis								
	12 rocks (Au, Ag, Cu, As)			@	\$19.03	\$	228.36		
	158 soils (Au, Ag, Cu)			<i>@</i>	\$12.38	1	,956.04		
	3 silts (Au, Ag, Cu)			@	\$12.38	-	37.14		
			Total	Ge	eochemistry	:		\$ 2	2,221.54
iii)	Room and Board								
		15 man	days	@	\$ 50/day			\$	750.00
iv)	Consumables (flagging, topofill thre tyvek tags, markers, etc.)	ead, samp	ole bag	ţs,				\$	110.46
v)	Expediting and Freight							\$	500.00
vi)	Helicopter (Hughes-500D)	2.	.3 hrs	@\$	\$660/hour			\$:	1,518.00
vii)	Communications (radios, hand held	s, telepho	one, et	c.)		\$	100.00		
viii)	Mobilization/Demobilization							\$	150.00
ix)	Report (writing, drafting, reproduc etc.)	tion, secr	etaria	١,				<u>\$</u>	750.00
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APPENDIX 4

Rock Sample Descriptions

ROCK SAMPLES

Project:	ROCK and ROLL				_	r	TUCK	SAMPLES	Results Plotted By:		
Area (Grid): _ Collectors: _	RP.				-				Map: NTS: Date:28/09/89	1048/11 SurfaceUndergro	ound
	·····	REP	SAM	PLE	TYPE	(LENG	TH)	-			T
SAMPLE NUMBER	LOCATION NOTES	SAMPLE	GRAB	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DES	SCRIPTION	MAP Sheet
30651	300ft.contour line at ≈ 0+80E		~					Lst	2-5% Py f.f. ; small white Lst ; well frac	l rusty patch in t.	
30652	below 300 ft. contour line , 2+00 E		/					Lst	1-370 Py f.f.; oxidi:	zed patches	
30653	200ft. contour line (east brg.) 6+00E (320° for ≈50m)		<i>></i>					Andesite	tr-170 Py fofo & diss fofo ; mod. well	ems ; > minor carb fract.	
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oject:	Rock & Tec North S	ide				-	İ	ROCK	SAMPLES	Results Plotted By:	<u></u>
llectors: _	J Boles					`` · ·				Date: Sept 28 '89 Surface Underg	jround_
	1		REP	SAM	PLE "	TYPE	(LENC	GTH)			
SAMPLE NUMBER	LOCATION	NOTES	SAMPLE	GRAB	CHIP	CHANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION	MAP Shee
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Project: Area (Grid):_	Bale & Roll SE corner of Ro	ck [°] C	leir	17	-	f	ROCK	SAMPLES	Results Plotted By: Map:NTS:/0 4 73/11
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SAMPLE NUMBER	LOCATION NOTES	SAMPLE NUMBER	GRAB	CHIP	HANNEL	CORE	FLOAT	ROCK TYPE	SAMPLE DESCRIPTION SAMPLE DESCRIPTION
30001	near Istut & month of cieck		~					Sultations	dk new is mist attances
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30604	languaguail above		<i>✓</i>					Chert	It were to It your is ythe oil veinlets &
30605	Foot would before 30603		6					Saltstore	yrea to de grey - with to mode and and ate-cal veralets of Datches, cust stain
30606	Swiftererz () 290		×					Siltstore	are with grey rist ff , whe gree
30407	2 500:							Meta Volcani	Green, sillufaction places, chil altern places, gt= ff; verillet= poteties, some
3060 8	above L400 1+00W 20 420'		V					Meta-Valcanic	Grein strong chil alt sampt: inclucion several len wide at veins
									/
				 	<u> </u>				

Project: Area (Grid): Collectors:	Rock & Roll Roll South of C-J-Lloyd	auni li	ike				ROCK	SAMPLES	Results Plotted By:NTS:O4B/11 Date:Sect29/89SurfaceUndergrou	Ind_
SAMPLE NUMBER	LOCATION NOTES	REP. SAMPLE NUMBER	GRAB WAS	CHIP	CHANNEL AL	(LENC	FLOAT (H	ROCK	SAMPLE DESCRIPTION S	MAP SHEET
30626	5+505 9+80 E			· ·				Muddy Lst	brown-grey, mudding f.g. maxive, The gtz + cal + py veralets, The 1% f.g. diss. py	
	· · · · · · · · · · · · · · · · · · ·									

APPENDIX 5

Rock Sample Results

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, 3.C. V7P 2R5 (604) 985-0681 Telex 04-352667



Geochemical Lab Report

			1	A DIVISION O	INCHCAPE INS	PECTION & TESTING SERV	TCES DATE PRINTED: 17-1	001-89
REPORT: V89-	06927.0						PROJECT: R	PAGE 1
SAMPLE	ELFNENT	Au	Ag	As	Cu			
NUMBER	UNITS	PPB	PPN	PPM	PPN			
R2 30601		6	<0.1	13.2	35			
🗃 R2 30602		<5	<0.1	4.3	20			
R2 30603		<5	0.2	39.0	136			
R2 30604		<5	0.1	2.1	71			
R2 30605		6	<0.1	7.8	69			
R2 30606		<5	<0.1	5.6	17			an Marana da Angala Sanan Angala da Anga
R2 30607		<5	<0.1	1.9	13			
R 2 30608		6	0.2	1.0	108			
R2 30626		6	0.2	16.3	25			
R2 30651		16	0.3	16.7	17		<u> </u>	
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APPENDIX 6

Soil and Silt Sample Descriptions

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Project: Area (Grid) Collectors:	Project:				LES		Resu Map Date	sults Plotted By:												
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KEEWATIN	ENGINEERING	INC
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Proj e ct: Area (Grid)	Rocl	loll	SOIL SAM	PLES		Resi Map	ults :	Plot	ed E)y:	N	1.T.S	.:	104	ß/	11				
Collectors	: <u>lav</u>	+ 12.16	r	i			Date	<u>} </u>	<u></u>		nher		<u> </u>	<u></u>		S = i		Dat		_
Sample	Sample L(Notor	Eot	slope		pund	oded	ooded	egen	51101			ampled	Horizon B	Horizon	Jevelop	Parent	Material	
Number	← ج	Station	NUTES	Valley Bat	Direction of	Hill Top	Level Gro	Heavily Wo	Sparsely W	Burnt	Logged	Grassland	Swampy	Horizon Sc	Depth to 1 Sample	G aod	Poor	Drift	Bedrock	Colour
87174-5322	7 44U E				<u> </u>		Ń	$\langle \rangle$						15	35	$\overline{\langle}$			·	<u>37</u>
					11/10			~						<u> </u>	-			·	<u> </u>	
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Eine Charles Charle

SOIL SAMPLES

Project: RCCVI RCLL

Area (Grid): _____NCRTH

Results	Plotted	By:
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Map: ______ N.T.S. : ____ 104 3 11

Collectors: N.C.K + JULIA

Date _ SEPT 28, 1939

[Sample	Location		To	pogr	aphy			V	egeti	otion	I				Soi	1	Date	a	
Sample			Notes	lottom	of slope		round	Wooded	Wooded			p		Sampled	Horizon ple	Horizon	Develop - ment	Parent	Material	
Number	Line	Station		Valley B	Direction	Hill Top	Level G	Heavily	Sparsely	Burnt	Logged	Grasslar	Swampy	Horizon	Depth to Sam	Good	Poor	Drift	Bedrock	Colour
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<u> </u>		<u>C FIS IN</u>		ļ	12 315			<u> </u>	ļ <u> </u>	[1à	ibra	<u>v</u>	<u> </u>		<u> </u>	OB
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	·	1-25~			32.55					<u> </u>				18_	25.00		<u>.</u>		<u> </u>	Grist
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,			Bi mannie - Noulder Field							<u> </u>				+						ļ
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<u>``</u>	11	MACC N	No humple - drainage (?)		 									3	 		L			
· · ·		+ thick					\checkmark	1						B	ZSim	V			1	OBr
	3.5	Brach			15%			V						<u>B.</u>	ZUcm		<u>/</u>	· ·		CBr
		5.50%			1055			1						B	2400		1		1	Br
		6 TUCM		L	40-56									3	iCan					OBr
	1.5	G+SCN			ACIE			~		·				B	ilicm		\checkmark		1	Br_
		THOOM	N: Sample - outcrop																	
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										L										
	ŀ													L						
								L		L										

SOIL SAMPLES

Proi ect :	ROCK	+ ROLL

Area (Grid): _____North_

Results Plotted By: _____

Collectors: C.J. LLOYD + STEVE ABRAM

Map: ______ N.T.S. : ___1C4B/11 Date _____ SEPT. 28/89

	Sample L	ocation		To	pogr	aphy			V	eget	atian					Soi	1	Dat	a 	
Sample			Notes	Bottom	of slope	٩	Ground	Wooded	Wooded			pu	×	S ampled	o Horizon nple	Horizon	Develop - ment	Parent	k Material	
Number	Line	Station		Valley	Direction	Hill To	Level	Heavily	Sparsely	Burnt	Logged	Grassla	Swamp	Harizon	Depth 1 San	Good	Poor	Drift	Bedrocl	Colour
89 DI-5	9001	0+00W	30°		5			~						B	2500	~		_		DB
UIRA J.		0+25W	30°		5			~	 					B	20cm		 			OK.
-1	~ ~	CHAOW	300		5	<u> </u>	<u> </u>	~	ļ	 				13	20cm	<u> </u>	ļ			OB
	v	0+73W	30°	' _	5	I	ļ	V	 	ļ				15	20cm					00
u	*1	1+00W	35°	·	12		ļ		<u> </u>	<u> </u>				10	120cm		┨────			00
	**	1+25W	35°	ļ	15		<u> </u>	1						10	11300	5				CR
ц	*	1+ 50W	35°		12	<u> </u>		10	┨────			ļ		13	IN.	-	╂───		┨────	DO AR
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u .		2+004	35]	15	<u> </u>		1-				<u> </u>	┣──	1 X	1300				<u> </u>	R
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ч		3+000			12		<u> </u>	17		÷	+				200		<u> </u>		<u>† </u>	INR
61	<u> </u>	3+25W	40		12	┼				+		<u> </u>		R	2000	ラ	+	†		10R
n	ч	3+500	40		12	+		+						FZ	200	<u> </u>	$\downarrow \sim$			GR
<u> </u>	~	3+75W	46-		12				┨		+	·		$+\sim$	1. v	}		<u>†</u>		100-
	n	4+00W	NYS - talus	+	12 =			$\frac{1}{\sqrt{2}}$, 						20.	<u> </u>	12	+	+	R
	<u>~</u>	4+25W	35	╂	122	; 		+	.+		+			AIA	200		Ī	+	+	R
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м	<u>×</u>	5+25W	40	. 	누들			+	+	+	+	<u> </u>	+	172	2000		12	1	+	
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<u>н</u>	<u> </u>	16+000	33	╁──	pc	+		+-	+			<u> </u>		+	-	<u> </u>	-	+	+	100
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U\	<u> </u>	16+50W	30	+	25			+	+		·+			17	130		+	+	+	TOR
<u> </u>	· · · · ·	6+75n	70-	+	136	+		1"				1		10		<u> </u>	+	+		122
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	· · ·			1			<u> </u>	. 		<u></u>	1	1		- L		4				

SOIL SAMPLES

Project: ROCK'N ROLL

Area (Grid): LOST LAKE

Collectors: NICK + JULIA

Results Plotted By: _____

Map: ______ N.T.S. : ____ 10+B/11

Date SEPT 29, 1929

	Sample L	_ocation		τc	opogr	aphy		ļ	V	eget	ation	•				Soi	1	Dat	٥	
Sample			Notes	Bottom of slope	if slope		Ground	Wooded	Wooded			ס		S ampled	Horizon de	Horizon	Develop – ment	Parent	Material	
Number	Line	Station		Valley B	Direction o	Hill Top	Level G	Heavily	Sparsely	Burnt	Logged	Grasslan	Swampy	Horizon	Depth to Samp	Good	Poor	Drift	Bedrock	Colour
89RJ-5	400	C+COW			4CW			V	L					B	8cm		V		V_	Br
	NN	0+25~	NO SAMPLE - bailderslide	L	<u> </u>		 	ļ	ļ	ļ				L _	 		<u> </u>		ļ	<u> </u>
	~~	C+5cn		ļ	30 105		<u> </u>	×		ļ				B	5cm		<u> </u>		~	Br
	~	C+75 W	NO SAMPLE - boulderslide	ļ			ļ	<u> </u>	ļ					÷			 		 	
	<u> </u>	1+00W		ļ	AZN	ļ	ļ	<u> </u>	 	┟───				B	Rem			 		10Br
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<u>`</u>	<u>``</u>	1+50W		<u> </u>	CNINE			1.	 					1B	55cm		Ι-ν΄-	┝───	<u> </u>	10Br
	<u> </u>	1+75w			<u> </u>		<u> </u>	<u> ~</u>		 				B	10 cm			 	↓ ∠	1Br
	<u> </u>	2100W			AUTNE			<u> <</u>	<u> </u>					B	10cm		<u> </u>	<u> </u>	<u> /</u>	CB-
	<u>, , , , , , , , , , , , , , , , , , , </u>	2:25			MONN	ŧ	 	<u> ~</u>	<u> </u>					B	12:0	\checkmark	<u> </u>	<u> </u>	Ļí	
	<u> </u>	2.50%		<u> </u>	11	<u> </u>		×.		┨───	<u> </u>			L <u>B</u>	30 cm	V.	┨────	┨────	₩÷-	1015
	<u>,,</u>	2+75W			<u>35 N</u>			·V	<u> </u>	<u> </u>				<u>ل</u> هـ	15cm	<u> </u>	┨───	┼───	Ľ–	1012
<u>``</u>	<u> </u>	3+00	<u>·</u> <u>·</u> <u>·</u> <u>·</u>		ZJAIN	ŧ	<u> </u>	<u> </u>	 	 		·		0	1. Sem	\checkmark		┢━━━	₩,	CBr
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Project: _	Rode	+ Roll		SOIL S	AMP	LES		Resi	ults	Ploti	ed B	}y:				. <u></u>				
Area (Grid	1: Lost	Lake						Μαρ	:				N	I.T.S.	. :	1C41	3/1)		
	$C \rightarrow$	ب لي ا	+ Sleve Abrin					Date		2	Cept.	2	9/	29						
Collectors	<u>;</u>	2 00 0/ A	- JAENE HULAN					Dure							_					
	Sample La	ocation			To	pogr	aphy			V	egeto	otion	•				501	1 		,
Sample			Notes		ottom	if slope		round	Wooded	Wooded			ק		Sampled	Horizon ole	Horizon	Develop - ment	Parent	Material
Number	Line	Station			Valley B	Direction o	Hill Top	Level G	Heavily	Sparsely	Burnt	Logged	Grasslan	Swampy	Horizon	Depth to Samp	Good	Poor	Drift	Bedrock Colour
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R9RL-S	9+50E	1+505		<u> </u>		E	I	 							$ \underline{B} $	30	<			
89RL-S	9+50E	2+005		103-	ļ	32	 	ļ	~	 					<u>B</u>	-25	\angle			d-b
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	"	11+55 F		5°.		SW			1						B	-2	1	<u> </u>	<u></u>	det
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+1	ų	15+00E			<u> </u>	<u> </u>	 	10	ļ	<u> </u>		 	{		15	-20			\vdash	- Cut
<u> </u>		15+52E		<u>30°</u>	┨───	<u>↓</u> Ε.	<u> </u>		+	╂				┨────	15	1.5			+	
		EOL.				╂───		∤	+	┨	<u> </u>	<u> </u>						+-	╂	<u> </u>
					╂	<u>+</u>	+		+		<u> </u>	┨	<u> </u>					+	<u> </u>	├──├ ─
	- <u> </u>	<u>}</u>			 	+	<u> </u>	<u> </u>	<u>†</u>	<u>† – –</u>	<u> </u>	<u> </u>		1	1	+		+	<u> </u>	<u>├──┼─</u>
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Topography

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Hill

Bottom

Valley

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Ground

Level

SOIL SAMPI	_E
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Project:	Rock &	Roll
Area (Grid):	Lost Lake	

Sample Location

Line -Station

Notes

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Fallon Frons

310

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Populto	Distad	D
Results	Plotted	Dy: _

Wooded

Sparsely

Wooded

Heavily

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Collectors: July # Mile

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3+2 V

-75 U

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125 U

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1-75,0

The V

3+35 N

2+5 N

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SHOON

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Sample

Number

841:4-3-1-

1:2 Simol

No Som 2

120 Simile

D2 :

Secrember 31 1957 Date ____ Vegetation

Burnt Logged

Map:______N.T.S.:_104_13/11

Sampled

Horizon

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SOIL SAMPLES

Area	(Grid):	Lo	st L	ake	•

Results Plotted By: _____

Collectors: Jay & Mile

Map: ______N.T.S.: 10+ B/11 Date September 29 1980

	Sample L	ocation		To	pogr	aphy			V	egeto	otion)				Soi	1	Data	0	
Sample			Notes	lot t om	of slope		round	Wooded	Wooded			pt		Sampled	Horizon ple	Horizan	Develop – ment	Parent	Material	
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4C1114-466	7+50N						Ś							15	<u>:4</u> .j	ビ			$\overline{\mathbf{v}}$? <u>`</u>
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STREAM SEDIMENTS Results Plotted By:

Project: ___ ROCK N ROLL

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Collectors:	N14K + JULIA				Date	:	EPT	28.1	989							
			SEDI	MENT	DAT	A	5	TRE	AM D	ATA		5				
Sample	NOTES	ravel	pu	<u></u>	ау	rganic	ank	ctive	idth	epth	t{ elo-	RIN	תרד) אא			
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89RT-L	Sample was taken from Bresh silt deposits on top of the		27.	987.			\checkmark	\checkmark	Sim	40cm	Fust					
L400	bank - nothing was available from creek directly															
0+68W																
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Project:	ROCK +	ROLL			STREAM	SED	IMEN	ITS	Resu	lts Pl	lotted	By:									
Area (Grid):	LOST	LAKE							Мар					N	.T.S.:		041	<u> ? / 1 [</u>			
Collectors :	C.J.11	(0YD + 3	TEVE ABRA	<u>qn</u>					Date	:	5	EPT	- 2	9/	89						
			· · · · · · · · · · · · · · · · · · ·				SEDI	MENT	T DAT	A	S	TRE	AM D	ATA							
Sample Number			NOTES			Gravel	Sand	Silt	СІау	Organic	Bank	Active	Width	Depth	Velo- city	SPRING	DRY GULLY				
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Project:	ROCK'N ROLL		STRE	AM SED	IMEN	ITS	Resu	lts Pl	lotted	Bv:									
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Collectors:	NICK + JULIA		•				Date	:	DEPT	29	,19	189							
	·····				SEDI	MENT	T DAT	A	S	TRE	AM D	ATA		(7)					
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APPENDIX 7

Soil and Silt Sample Results and Histograms







Bondar-Clegg & Company Ltd. 130 Pembetton A.e. North Vancouver B.C. V7P 2R5 (604) 985- 0681 Telex 04-352667



Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & LESTING SERVICES

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	REPOR1: V89-0692	28.0				PROJECT: R			PA	PAGE 1	
						L					
a	SAMPLE	ELEMENT	Αu	Ag	Cu	SAMPLE	ELEMENT	Au	Ag	Cu	
	NUMBER	UNITS	PPB	PPN	PPM	NUMBER	UNITS	PPB	PPH	PPH	
	S1 89RJ-S 1400	3+500	11	П 3	23	S1 90R1-S 9+50	F 1+005	<5	0.2	16	
	S1 89RJ-S 1400 3	3+254	11	0.2	17	S1 90RI -S 9+50	= 1+50S	<u>ر</u> ۲	0.5	13	
	S1 89RJ-S 1400	3+00W	9	0.3	16	S1 90RL-S 9+50	E 2+00S	<5	0.3	17	
	S1 898J-S 1400 2	2+75 U	7	0.3	28	S1 90RI-S 9+50	2+505	(5	N.4	18	
.1	S1 89RJ-S 1400	2+501	<5	0.3	25	S1 90R1 -S 9+50	E 3+00S	<5	3.8	15	
	S1 89RJ-S L400 2	2+25W	<5	0.2	16	S1 90RL-S 9+50	3+505	<5	0.9	16	
	S1 89RJ-S L40D	2+00W	<5	0.4	10	S1 90RL-S 9+50	E 4+00S	<5	<0.1	14	
	S1 89RJ-S L400 1	1+75W	<5	0.2	71	S1 90RL-S 9+50	E 4+50S	<5	0.4	12	
	S1 89RJ-S L400 (1+50W	<5	0.4	366	S1 90RL-S 9+50	e S+nns	9	<0.1	13	
	S1 89RJ-S L400 1	1+25₩	<5	0.3	98	S1 90RL-S 9+50	5+50S	6	0.3	13	
	60.1 2 J 999 12	1+000		Π ζ		C1 9001_C 9150	51510		<u> </u>	11	
	51 97NJ~3 L4UII . S1 999 LS L4UII .	17009	()	0.0 8 1	04 11	31 70K-3 7+30 94 9001 -9 9+50	5157C	0 25	20.1	13	
11. J	S1 992.1-S 1400 0	0100 0100	<5 /5	0.1	11	S1 7012-3 7730	\$ 10+00F	<5 75	20.1	11	
	S1 8988 -S 840' A	4+750	<5 <5	<î 1	8	S1 8981-S 5+50	S 18+58E	6	0.1	19	
	S1 89RL-S 840'	6+50W	<5 <5	<0.1	11	S1 89RL-S 5+50	S 11+R0F	ر» د	n.7	14	
·					·						
	S1 89RL-S 840' (6+00W	<5	0.1	29	S1 89RL-S 5+50	6 11+50F	<5	2.8	30	
	S1 89RL-S 840'	5+75W	<5	0.1	10	S1 89RL-S 5+50	S 12+NNE	5	0.2	11	
r. 	S1 89RL-S 840' 5	5+SOW	13	1.2	153	S1 89RL-S 5+50	5 12+50F	<5	0.3	8	
	S1 89RL-S 84D' !	5+25W	6	0.5	39	S1 89RL-S 5+50	S 13+00E	<5	0.5	16	
	S1 89RL-S 840' 5	5+00W	<5	0.2	94	S1 89RL-S 5+50	S 13+50E	<5	0.9	22	
- 7	S1 89RI -S 84D'	4+75₩	11	0.4	79	S1 89RL-S 5+50	S 14+00E	<5	0.5	10	
	S1 89RL-S 840' 4	4+50W	7	0.5	38	S1 89RL-S 5+50	S 14+50F	<5	0.3	18	
	S1 89RL-S 840' 4	4+25N	<5	0.4	1	S1 89RL-S 5+50	S 15+00E	<5	0.2	11	
- 19	S1 89RL-S 840' 3	3+75W	10	0.4	27	S1 89RL-S 5+50	6 15+50F	<5	0.1	16	
	S1 89RL-S 840'	3+50N	<5	0.2	24	S1 89RN-S 200	2+00E	<5	<0.1	14	
	\$1 89RI -\$ 84R' 3	2+254	<u> </u>	0.5	16	S1 89RN-S 200	7+25F	(5)	n 3	12	
an d	S1 89RL-S 84D'	3+001	۲.5 ۲.5	1.0	19	S1 89RN-S 200	2+50F	<5 <5	0.1	11	
	S1 89RL-S 840' 2	2+75₩	<5	0.5	86	S1 89RH-S 200	2+75E	<5	0.2	20	
	S1 8981-S 900'	2+504	<5	0.7	195	S1 89RH-S 200	3+00E	5	0.1	12	
-i - sagi Linita	S1 89RL-S 900' 2	2+25W	<5	0.5	28	S1 89RM-S 200	3+25E	<5	0.4	11	
	S1 89RL-S 900'	2+DON	<5	<0.1	20	S1 89RN-S 200	3+50E	<5	<0.1	11	
	S1 89RL-S 900' 1	1+75W	<5	0.1	7	S1 89RH-S 200	3+75E	<5	<0.1	5	
	S1 89RL-S 900'	1+50W	<5	<0.1	5	S1 89RN-S 200	4+00E	<5	0.1	6	
	S1 89RL-S 900' 1	1+25W	<5	<0.1	6	S1 89RM-S 200	\$+25E	<5	0.2	10	
	S1 89RL-S 900'	1+00W	7	0.1	6	S1 89RN-S 200	4+5DE	<5	0.2	17	
		1.7511	 /C	ZN 4	 2	C1 800N_C 200	(↓ 75F	75	20.4	15	
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4.4	S1 8981-0 900* 1	0.00H 1+25U	54 54	<n 1<="" td=""><td>6</td><td>S1 89RM-S 200</td><td>5+25F</td><td>ۍ ۲۶</td><td><0.1</td><td>11</td><td></td></n>	6	S1 89RM-S 200	5+25F	ۍ ۲۶	<0.1	11	
	St 8981-S 900'	n+nn		<0.1 <0.1	7	S1 89RN-S 200	5+50F	رج رج	0.3	16	
	S1 90RI -S 9+50F	0+50%	<5	A.2	, 19	S1 89RH-S 200	5+75E	Ś	0.1	14	
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				PRUJECT: N							
	SAMPLE	ELEMENT	Au	Ag	Cu	SAMPLE	ELEMENT	Au	Ag	Cu	
	NUMBER	UNITS	PP8	PPN	PPN	NUMBER	UNITS	PPB	PPN	PPN	
	S1 89RM-S 20	0 6+00F	6	0.3	49	S1 89RM-S	400 5+75N	11	0.1	45	
	S1 89RN-S 20	IN 6+25E	7	0.1	11	S1 89RM-S	400 5+25N	10	0.2	9	
-	S1 89RM-S 20	0 6+50E	<5	<0.1	27	S1 89RH-S	400 5+00N	<5	<0.1	11	
	S1 89RM-S 20	IN 6+75E	5	0.5	26	S1 89RN-S	400 4+50N	<5	<0.1	9	
	S1 89RM-S 20	0 7+00F	<5	0.3	13	S1 89RM-S	400 4+25N	11	0.1	6	
	S1 89RM-S 20	N 7+25E	<5	0.7	21	S1 89RM-S	400 4+DNN	<5	<0.1	3	
أمذ ا	S1 89RM-S 20	0 7+50F	6	0.4	19	S1 89RM-S	400 3+75N	<5	0.3	13	
	S1 89RM-S 20	10 7+75E	10	<0.1	28	S1 89RN-S	400 3+25N	<5	<0.1	141	
	S1 89RM-S 20	0 8+00F	7	<0.1	64	S1 89RH-S	400 3+00N	6	<0.1	173	
	S1 89RM-S 20	N 8+25E	9	0.1	50	S1 89RM-S	400 2+75N	22	<0.1	32	
	S1 89RM-S 20	0 8+50F	7	0.7	16	S1 89RM-S	400 2+50N	<5	<0.1	11	
	S1 89RN-S 20	N 8+75E	6	0.2	16	S1 89RM-S	400 2+25N	<5	0.1	10	
1	S1 89RM-S 20	0 9+00F	12	0.4	23	S1 89RH-S	400 2+00N	<5	0.1	15	
	S1 89RM-S 20	IN 9+25E	9	0.2	20	S1 89RM-S	400 1+75N	<5	0.2	9	
	S1 89RM-S 20	N 9+50F	9	2.3	26	S1 89RH-S	400 1+50N	6	0.3	14	
	S1 89RN-S 20	IN 9+75E	19	0.6	23	S1 89RM-S	400 1+25N	<5	<0.1	38]
	S1 89RM-S 20	0 10+00E	7	0.2	22	S1 89RM-S	400 1+00N	<5	0.2	9	
ŝ	S1 89RM-S 20	10 10+25E	6	0.3	24	S1 89RM-S	400 0+75N	<5	<0.i	8	
	S1 89RM-S 20	0 10+50E	6	<0.1	18	S1 89RM-S	400 0+50N	6	<0.1	19	
	S1 89RM-S 20	10 10+75E	16	0.4	22	S1 89RH-S	400 0+25N	<5	<0.1	20	
	S1 89RM-S 30	0 0+00E	8	0.3	28	S1 89RM-S	400 0+00N	<5	<0.1	14	
	S1 89RN-S 30	10 0+25E	10	<0.1	1	S1 89RT-S	L400 7+50N	11	0.3	23	
	S1 89RM-S 30	0 0+50E	16	0.2	25	S1 89RT-S	L400 6+50W	<5	0.6	30	
د 1	S1 89RM-S 30	10 0+75E	10	0.5	22	S1 89RT-S	L400 6+00W	18	0.4	71	
	S1 89RM-S 30	0 1+00F	25	0.1	33	S1 89RT-S	L400 5+50N	22	0.7	24	
	S1 89RM-S 30	ID 1+25E	8	<0.1	17	S1 89RT-S	L400 5+00W	<5	0.3	20	
	S1 89RH-S 30	0 1+50E	10	0.2	12	S1 89RT-S	L400 4+50W	<5	0.3	11	
-	S1 89RM-S 30	IN 1+75E	12	<0.1	8	S1 89RT-S	L400 3+50W	6	<0.1	6	
	S1 89RM-S 40	0 9+00N	14	0.1	16	S1 89RT-S	L400 3+00W	<5	0.2	11	
	S1 89RH-S 40	M 8+75N	6	0.5	22	S1 89RT-S	L400 2+75W	<5	0.2	7	
	S1 89RM-S 40	0 8+50N	13	0.1	10	S1 89RT-S	L400 2+50W	<5	0.1	8	
	S1 89RM-S 40	10 8+00N	<5	<0.1	7	S1 89RT-S	L400 2+25W	<5	0.1	8	
	S1 89RM-S 40	0 7+75N	12	0.2	8	S1 89RT-S	L400 1+25W	<5	<0.1	2	
	S1 89RM-S 40	10 7+50N	<5	<0.1	13	S1 89RT-S	L400 1+00W	<5	0.2	5	
	S1 89RM-S 40	0 7+25N	8	0.1	16	S1 89RT-S	L400 D+5UN	<5	<0.1	5	
	S1 89RM-S 40	10 7+00N	6	0.4	44	S1 89RT-S	L400 0+00W	<5	<0.1	4	
	S1 89RM-S 40	0 6+75N	<5	<0.1	9	S1 89RT-S	1400 D+25 W	<5	<0.1	2	
r Link	S1 89RM-S 40	10 6+50N	<5	<0.1	14	S1 89RT-S	L400 0+75W	<5	0.3	9	
	S1 89RN-S 40	0 6+25N	<5	0.2	10	T1 89RJ-L	L400+00 0+00W	<5	0.3	22	
	S1 89RN-S 40	n 6+00N	<5	0.3	11	T1 89RL-L	9+5DE 2+87S	6	0.2	25	

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APPENDIX 8

Soil Test Pits

ROCK & ROLL PROJECT - TEST PIT

Date: September 29, 1989

1) Location: 5+40S, 13+55E

2) Description of Soil Horizon Development:

0	-	10	cm	A _H and A
10	-	40	cm	B orange brown
40	-	60	cm	black washed sand
60	-	64	cm	hard clay
64	-	80	cm	black sand
80	-	85	cm	hard clay

3) Description of Topography:

Flat area between two hills.

4) **Results of Investigation:**

Outwash deposits will mask the underlying bedrock's contribution of Au, Ag and Cu to the soil horizons.

ROCK AND ROLL PROJECT - TEST PIT

Date: September 29, 1989

L) Location: 5+50S, 9+50E

2) Description of Soil Horizon Development:

0	-	5	cm	A, A _H
5	-	20	cm	B dark orange brown
20		75	cm	washed sand layer
75	-	80	cm	clay hardpack
80	-	85	cm	washed sand
85	- 1	100	cm	rocky wet clay - 'C'

3) Description of Topography:

20° SW slope, open large trees.

4) **Results of Investigation:**

Sampled 89RL-S, 5+50S, 9+50E B @ 15 cm Sampled 89RL-S, 5+51S, 9+50E sand @ 40 cm Sampled 89RL-S, 5+52S, 9+50E clay @ 1.0 m

Outwash deposits will mask the underlying bedrock's contribution of Au, Ag and Cu to the soil horizons.



GEOLOGICAL BRANCH ASSESSMENT REPORT

19,556

LEGEND

x Soil Sample Site

• Silt Sample Site

x 0.3 Geochem Results (Ag, ppm)

Creek

🕑 Helipad

Claim Boundary (assumed)



CONSOLIDATED POWERGEM RESOURCE CORP./ THIOS RESOURCES INC.						
ROCK & ROLL PROJECT						
SOIL AND SILT SAMPLE						
LOCATIONS AND RESULTS						
-Ag(ppm)						
NTS: 104B/11						
PROJECT GEOLOGIST R. PEGG						
100 200 300 400 500 METRES						



LEGEND

x Soil Sample Site

• Silt Sample Site

x23 Geochem Results (Cu,ppm)

🔶 Creek

-

Helipad

Claim Boundary (assumed)



CONSOLIDATED POWER THIOS RESC	GEM RESOURCE CORP./
ROCK & ROL SOIL AND S LOCATIONS A -Cu(j	L PROJECT ILT SAMPLE ND RESULTS opm)
DATE: OCT. 1989	NTS: 104B/11
PROJECT:	PROJECT GEOLOGIST : R. PEGG
	200 300 400 500 METRES
KEE WAT IN ENGINEER	PING INC. MAP No. 5





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X





LEGEND X Soil Sample Site O Silt Sample Site X 22 Geochem Results (Au, ppb) Creek Helipad Claim Boundary(assumed)



CONSOLIDATED POWERGEM RESOURCE CORP./ THIOS RESOURCES INC.							
ROCK & ROLL PROJECT							
SOLL AND SILT SAMPLE							
LOCATIONS AND RESULTS							
-Au(ppb)							
DATE: OCT. 1989	NTS: 104B/11						
PROJECT:	PROJECT GEOLOGIST : R. PEGG						
	200 300 400 500 METRES						
KEEWATIN ENGINEERING INC. MAP No. 3							